

***United States Court of Appeals
for the Second Circuit***



EXHIBITS

** PLEASE RETURN TO **
** RECORDS ROOM **

77-6069

United States Court of Appeals

FOR THE SECOND CIRCUIT

MORAN TOWING & TRANSPORTATION Co., INC. and
TUG JUDY MORAN, her engines, tackle, etc.,

*Defendants and Third-Party
Plaintiffs-Appellants,*

—against—

UNITED STATES OF AMERICA,

Third-Party Defendant-Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

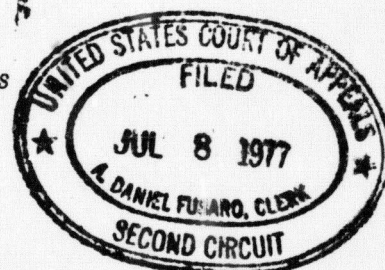
JOINT EXHIBIT VOLUME

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Tel. 264-0480



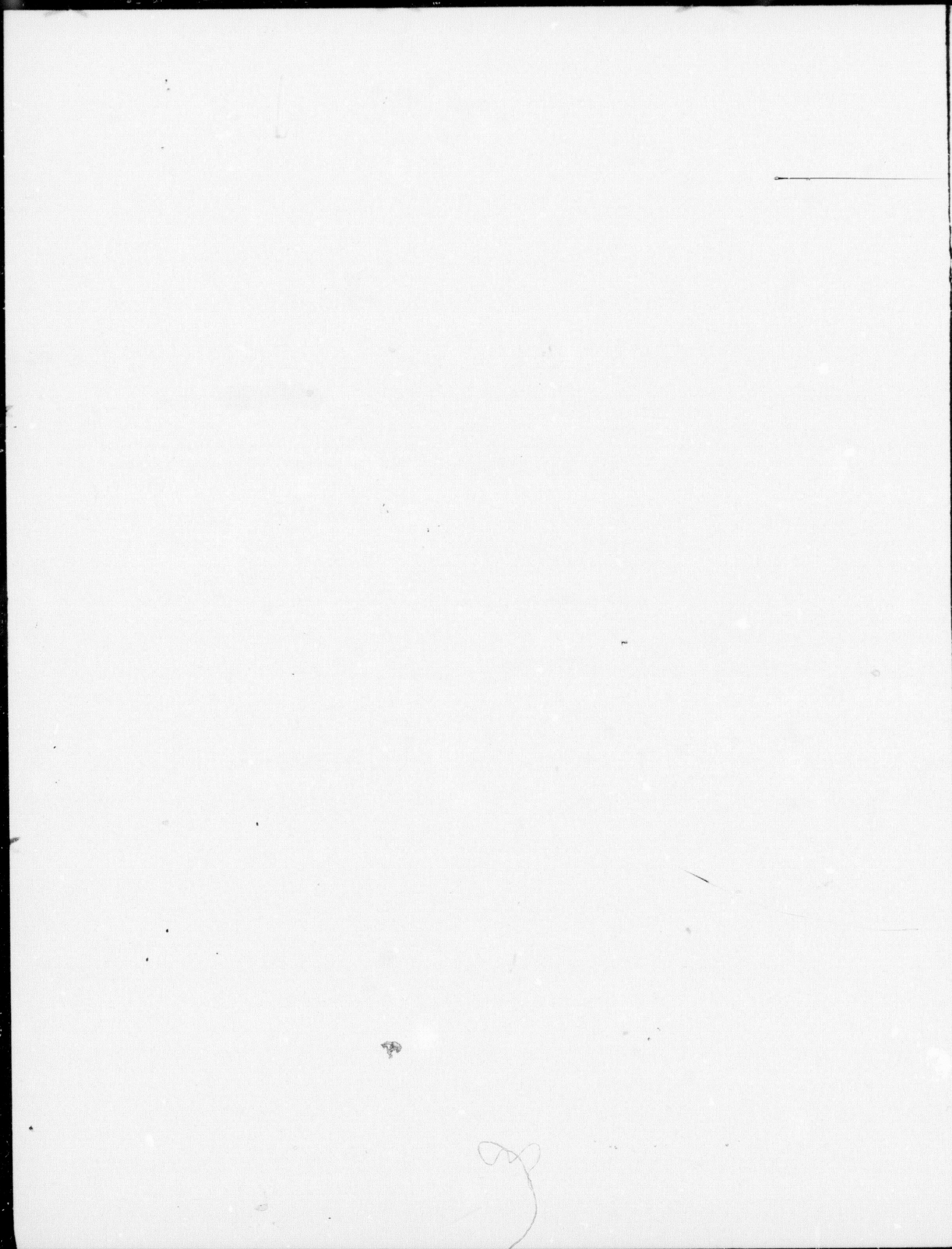


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UNITED STATES EXHIBITS

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Excerpt From Log Book of JUDY MORAN

Thursday 18 Oct 1973

0001 W/LD T/B - 695 ENROUTE PAULSMOOR TO ALBANY
0015 " " " STRUCK SUBMERGED OBJECT IN
LUMP, NO CHANNEL APPARENT
3.00 P.M. SOUTH OF HOUGHTON
ISLAND DIXE TYPEN 26.

0800 1030 USCG & ALBANY & CROCHAMOND REPRESENTATIVES MEETING

0300-2305 " " - " - LANDED ZONE 17 MOBILE ALBANY
2305-2320 W/LT " " - " - GAIN ON THE HUSSER.
2320 W/LT T/B 3-95 ALBANY FOR NEW YORK.

FRIDAY 19 OCTOBER 1973

0001 W/LT T/B "13-95" ENROUTE ALBANY TO NEW YORK
0015 " " " " - " - CASTLETON LAUNDREY
0220 " " " " - " - HUDSON RIVER
0517 " " " " - " - SAUGERTON LIGHTS
0407 " " " " - " - KINGSTON POINT
0550 " " " " - " - Poughkeepsie Bridge
0718 " " " " - " - NEWBURG BRIDGE
0810 " " " " - " - WEST POINT LT.
0900 " " " " - " - LEAN BRIDGE
1000 " " " " - " - TOWN OF LEAN
1100 " " " " - " - LEAN BRIDGE
1153 " " " " - " - LEAN BRIDGE
1245 " " " " - " - LEAN BRIDGE
1555-1605 " " " " - " - DEPT. OF COMMERCE PICKUP AT LEAN
1645 " " " " - " - SEATTLE PORT SOCIETY
1745-1825 " " " " - " - PORT MOBILE - OFF 65th ST. LEAN
1830 - W/LD T/B "104" - " - RAILROAD BRIDGE LEAN
1900 " " " " - " - OFF 65th ST. LEAN
2000 " " " " - " - SEATTLE PORT SOCIETY
2100 " " " " - " - ON LEAN
2212 " " " " - " - SEATTLE PORT SOCIETY
2345 " " " " - " - ALBANY TO W/L

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I-2
EXHIBIT 2

Excerpt From Daily Tug Report of Tug
JUDY MORAN

ONE WORLD TRADE CENTER, SUITE 5335, NEW YORK, N. Y. 10048

502

TUG *JUDY MORAN* DAY *THURSDAY* DATE *18 OCTOBER* 19 *73*

DEFENSE USE ONLY

TIME	W	D	R	I	LOCATION	(TO)
0001	W	D			ENROUTE <i>PARADE</i> TO <i>ALBANY</i>	
0015	"	"			THREE STARK SURFACED OBJECT ON <i>COAST</i> LINE <i>SHORE</i> -	
					INITIALLY 300 FEET SOUTH OF <i>ADVENTURE</i> ISLAND DINE <i>4700</i>	
					"36" IN NEAR MID CHANNEL. <i>E/STINK</i> OF <i>SHARP</i> HORN.	
					TRANSFERRING CHASE TO "3" TRACK TO <i>PREVENT</i> <i>PROLUTION</i> .	
					PROCEEDING TO <i>ALBANY</i> .	
0200	"	"			LANDED <i>CHARGE</i> AT <i>PIECE</i> OF <i>ALBANY</i> . NO <i>EMERGENCY</i> OF <i>CHARGE</i>	
					LEAVES FROM <i>CHARGE</i> . <i>NY OFFICE</i> NOTIFIED, ALSO <i>U.S.C.G.</i>	
0600	"	"			<i>U.S.C.G.</i> OFFICIALS, <i>BOUCHING</i> AND <i>MOBILE</i> REPRESENTATIVE <i>ARRIVE</i>	
0300	I				STANDING BY <i>CHARGE</i> .	
2300					<i>CHARGE</i> READY TO <i>SAIL</i> .	
2300					<i>COAST</i> <i>HAUL</i> AND <i>UNDERWAY</i> .	
2300					<i>UNDERWAY</i> TO <i>CELEBRATING</i> <i>DECK</i> , <i>PORT</i> <i>ANCHOR</i> .	

501

COMBAT (MAYNARD)
Deft. Exh. For ID *A*
PIL Exh. In EV
Charles Shapiro 9/10/74
Doyle Reporting Inc. *C.L.*

PLEASE SEND THESE REPORTS TO OFFICE DAILY

SIGNED *R. J. Moran* CAPTAIN

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This is a detailed topographic map of the Bronx, New York, focusing on the area around the Stuyvesant Canal and the Bronx River. The map shows contour lines indicating elevation, with labels such as 100, 200, and 300 feet. The Stuyvesant Canal is a prominent feature, running diagonally across the map. The Bronx River is also visible, flowing into the canal. Other landmarks include the Stuyvesant Canal, the Bronx River, and the Stuyvesant Canal. The map is labeled with 'Bronx', 'Stuyvesant', and 'Coxsackie'. A scale bar is visible in the bottom right corner.

E-4
EXHIBIT 4

Captain Maynard's Coast Guard Report

DISTRICT OFFICE OF THE COAST GUARD U.S. DEPARTMENT OF COMMERCE WASHINGTON, D.C. 20540	REPORT OF VESSEL CASUALTY OR ACCIDENT	FORM NO. 100-2003 REPLACES FORM NO. 100-100 REVISED 1/77
--	--	--

INSTRUCTIONS

1. An original and two copies of this form shall be submitted, without delay, to the Officer in Charge, Marine Inspection, in whose district the casualty occurred, or in whose district the vessel first arrived after such casualty.
2. If the person making the report is a licensed officer on a vessel required to be manned by such officer, he must make the report in writing and in person to the proper Marine Inspector. If because of distance it may be inconvenient for such an officer to submit the report in person, he may submit the required number of copies by mail. However, to avoid delay in investigation, it is desired that reports be submitted in person.
3. This form should be completed in full; blocks which do not apply to a particular case should be indicated as "N/A". Where numbers are unknown or none, they should be indicated as such. All copies should be signed.

NOTES: (1) Report all deaths and injuries, which incapacitate in excess of 72 hours, on CG-924E whether or not there was a vessel casualty.
 (2) Attach separate Form CG-924E to this report for each person killed or injured and incapacitated in excess of 72 hours as a result of the vessel casualty reported herein.

10. Officer in Charge, Marine Inspection, Port of _____		DATE SUBMITTED _____
---	--	----------------------

I PARTICULARS OF VESSEL

1. NAME OF VESSEL	2. OFFICIAL NUMBER	3. HOME PORT	4. NATIONALITY
5. TYPE OF VESSEL (Pri., pass., etc.)	6. PROPULSION (Steam, diesel, etc.)	7. GROSS TONNAGE	8. REGISTERED LENGTH OR L.C.A.
9. BUILD MATERIALS	10. YEAR BUILT	11. RADIO EQUIPMENT ☐ TRANSMIT ☐ RECEIVE ☐ VOICE ☐ CW (Key)	
12. (a) RADAR EQUIPPED ☐ YES ☐ NO		(b) IF YES, RADAR OPERATING AT TIME OF CASUALTY ☐ YES ☐ NO	
13. (a) CERTIFICATE OF INSPECTION ISSUED AT PORT OF _____		(c) DATE CERTIFICATE OF INSPECTION ISSUED _____	
14. (a) NAME OF MASTER OR PERSON IN CHARGE (Indicate which) _____		(b) DATE OF BIRTH _____	(c) LICENSED BY COAST GUARD ☐ YES ☐ NO
15. (a) NAME OF PILOT (If on board at time of accident) _____		(b) PILOT SERVING UNDER AUTHORITY OF LICENSE ISSUED BY ☐ USCG ☐ STATE ☐ FOREIGN	
16. (a) NAME OF OWNER(S), OPERATOR(S) OR AGENT (Indicate which) _____		(b) ADDRESS OF OWNER(S), OPERATOR(S), OR AGENT _____	

II PARTICULARS OF CASUALTY

17. (a) DATE OF CASUALTY _____	(b) TIME OF CASUALTY (Local or zone) _____	(c) ZONE DESCRIPTION _____	(d) TIME OF DAY ☐ DAY ☐ NIGHT ☐ TWILIGHT
18. LOCATION OF CASUALTY (Latitude and longitude; distance and TRUE bearing from charted object; dock; anchorage; etc.) _____			
19. BODY OF WATER (Geographical name) _____	20. RULES OF THE ROAD APPLICABLE ☐ INLAND ☐ GREAT LAKES ☐ WESTERN RIVERS ☐ INTERNATIONAL ☐ OTHER (Specify) _____		
21. (a) DID CASUALTY OCCUR WHILE UNDERWAY: ☒ YES ☐ NO (b) IF YES, LAST PORT OF DEPARTURE _____ (c) IF YES, WHERE BOUND WHEN CASUALTY OCCURRED _____			
22. (a) WEATHER CONDITIONS WHEN CASUALTY OCCURRED: ☐ CLEAR ☐ PARTLY CLOUDY ☐ OVERCAST ☐ FOG ☐ RAIN ☐ SNOW ☐ OTHER (Specify) _____			
(b) VISIBILITY (Miles, yds., ft., etc.) _____	(c) WIND DIRECTION _____	(d) FORCE IN KNOTS _____	(e) GUSTY ☐ YES ☒ NO
23. (a) SEA CONDITIONS WHEN CASUALTY OCCURRED _____	(b) SEA WATER TEMP (If available) _____	(c) HEIGHT OF SEA _____	(d) DIRECTION OF SEA _____
(e) HEIGHT OF SWELL _____	(f) DIRECTION OF SWELL _____		
24. (a) NATURE OF CARGO (Specify) _____	(b) AMOUNT OF DRY CARGO (Long tons) _____	(c) AMOUNT OF BULK LIQUID (Long tons) _____	(d) AMOUNT OF DECK LOAD (Long tons) _____
25. (a) DRAFT FORWARD _____		(b) DRAFT AFT _____	
26. (a) TYPES OF LIFESAVING EQUIPMENT USED, IF ANY _____		(b) NO. LIVES SAVED WITH LIFESAVING EQUIPMENT _____	(c) LIFESAVING EQUIPMENT SATISFACTORY ☐ YES ☐ NO (If no, explain in item 34)

GOVT (MAYNARD) KEY 6- FOR I.D. 9/10/74 CE 1

Captain Maynard's Coast Guard Report

Rev. of CG-2692 (Rev. 12-70)

27 CREW PASSENGERS OTHER (Specify)		28 ESTIMATED LOSS DAMAGE TO YOUR VESSEL	\$ 100.00
NUMBER ON BOARD		ESTIMATED LOSS DAMAGE TO OTHER VESSEL	\$ 0.00
DEAD/MISSING		ESTIMATED LOSS DAMAGE TO OTHER PROPERTY	\$ 2500.00
INCAPACITATED (over 3 days)		(Specify whether vessel, equipment, etc.)	
29 NATURE OF THE CASUALTY (Check one or more of the following. Give pertinent details in item 30.)			
COLLISION WITH OTHER VESSEL (S) (Specify)		EXPLOSION/FIRE (Other)	
		GROUNDING	
		FOUND/ER (Sinking)	
COLLISION WITH FLOATING OR SUBMERGED OBJECTS		CAPSIZING WITHOUT SINKING	
COLLISION WITH FIXED OBJECTS (Piers, bridges, etc.)		FLOODING SWAMPING ETC WITHOUT SINKING	
COLLISION WITH ICE		HEAVY WEATHER DAMAGE	
COLLISION WITH AIDS TO NAVIGATION		CARGO DAMAGE (No vessel damage)	
COLLISION (Other)		MATERIAL FAILURE (Vessel structure)	
EXPLOSION/FIRE (Involving cargo)		MATERIAL FAILURE (Engineering machinery, including main propulsion, boilers, evaporators, deck machinery, electrical, etc.)	
EXPLOSION/FIRE (Involving vessel's fuel)		EQUIPMENT FAILURE	
FIRE (Vessel's structure or equipment)		CASUALTY NOT NAMED ABOVE	
EXPLOSION (Boiler and associated parts)			
EXPLOSION (Pressure vessels and compressed gas cylinders)			
30 DESCRIPTION OF CASUALTY (Events and circumstances leading to casualty and present when it occurred. Attach diagram and additional sheets, if necessary.)			
WHILE TRANSITING THROUGH STRONG CURRENTS AND AGAINST THE WIND AND WAVES, APPROXIMATELY 1000 HRS, 10/10/71, THE VESSEL DUE TO ICE AND CURRENTS AND WAS ABANDONED AND REMOVED THE FOLLOWING DAY			
31 DAMAGE (Give brief general description and state if vessel is a total loss.)			
III ASSISTANCE AND RECOMMENDATIONS			
32. AUTO ALARM TRANSMITTED BY YOUR VESSEL: ☐ YES ☐ NO			
33(a) ASSISTANCE RENDERED BY STATIONS AND VESSELS (Include Coast Guard and other stations and vessels)		33(b) OTHER ASSISTANCE RENDERED	
34. RECOMMENDATIONS FOR CORRECTIVE SAFETY MEASURES PERTINENT TO THIS CASUALTY (Include explanation of unsatisfactory lifesaving equipment)			
TITLE		SIGNATURE	

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EXHIBIT 5

Coast Guard Investigation Report

G-OUT (MAYNARD) *174*
 Deft. Exh. For ID
 PH. Exh. In EV
 Charles C. 4/10/74
 Doyle Rep. *EA*

5943-19-74
4 February 1974

FIRST ENDORSEMENT ON IO Albany, New York Ltr 5943-19-74 dtd 4 February 1974

From: Commanding Officer, Coast Guard Marine Inspection, Albany, NY
 To: Commandant (GMVI)
 Via: Commander, Third Coast Guard District (m)

Subj: BUCHARD #95, O.N. 544907, in push tow of the JUDY MORAN, O.N. 545094
 grounding off Houghtaling Island on 18 October 1973, with no injury
 or loss of life.

1. Forwarded approved, including recommendations.

MATHEW WOODS

MW:sar

m
12 February 1974

SECOND ENDORSEMENT

From: Commander, Third Coast Guard District
 To : Commandant (G-MVI)

1. Forwarded approved.

C. B. WILLIAMS
 By direction

Coast Guard Investigation Report

RECEIVED

Commanding Officer
Coast Guard Marine Inspection
313 Federal Building
Albany, New York 12207

1973
MER. MARINE SAFETY DIV
THIRD CG DISTRICT 5943-19-74
4 February 1974

From: Investigating Officer, Coast Guard Marine Inspection, Albany, N.Y.
To: Commandant (CMVI)
Via: (1) Commanding Officer, Coast Guard Marine Inspection, Albany, N.Y.
(2) Commander, Third Coast Guard District (m)
Subj: BOUCHARD #95, O.N. 544907, in push tow of the JUDY MORAN, O.N. 545094
grounding off Houghtaling Island on 18 October 1973, with no injury
or loss of life.

1. Investigation of subject case is complete. A narrative report will not be submitted.
2. The proximate cause of the casualty was striking of an unknown submerged object in the Hudson River mid channel, approximately 300 feet south of Houghtaling Island.
3. Initial investigation determined the barge may have struck the remains of an old U.S. Coast Guard light house. However, a U.S. Army Corps of Engineers survey showed that the light house foundation was located 12 feet outside the channel, not mid channel where casualty occurred.
4. Damages in the amount of \$280,000 were sustained by the BOUCHARD #95. Repairs were completed under the cognizance of OCMI, New York.
5. Since there is deemed to be neither misconduct, actionable inattention to duty, nor negligence or willful violation of law or regulation on the part of licensed or certificated personnel, nor failure of inspected material or equipment contributory to the casualty, no further action is indicated. It is recommended that this case be closed with submission of this report.

S. A. McCALL

ENCLS: (1) CG-2692 - TUG JUDY MORAN
(2) CG-2692 - T/B BOUCHARD #95
(3) CG-4724

SAW:sar

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Coast Guard Investigation Report

DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-124 (11-70)		ADDENDUM TO U. S. TOWING VESSEL CASUALTY INVESTIGATION		Form Approved Bureau of Budget No. 04-R3064 Approval Expires 30 June 1971	
TO BE FILLED IN BY INVESTIGATING OFFICER					
NAME OF VESSEL JUDY MORAN		OFFICIAL NUMBER 545094		PROPULSION (gasoline, diesel, steam, Other (Specify)) DIESEL	
				TOTAL HORSE- POWER 3300	
1. SERVICE					
☐ HARBOR TUG (Vessel assistance) ☐ RIVER INLAND TOWING ☐ HARBOR/INTERCOASTAL TUG ☐ SWITCHER ☐ OCEAN/OFFSHORE TOWING ☒ OTHER (Specify) COASTWISE					
2. PERSON-IN-CHARGE OF NAVIGATION (OR WHEELSMAN)				Z# OR SOCIAL SECURITY NUMBER 052-01-0646	
AGE 56	YEARS EXPERIENCE IN SIMILAR CAPACITY 30	LITERATE ☒ YES ☐ NO	DUTY SCHEDULE 6 HRS ON 6 HRS OFF		NUMBER OF HOURS PRIOR TO CASUALTY ON DUTY 6
LICENSED BY COAST GUARD ☒ YES ☐ NO TYPE OF LICENSE ☐ MOTORBOAT OPERATOR ☐ OPERATOR/OCEAN OPERATOR ☒ MASTER ☐ MATE ☒ 1ST CLASS PILOT ☐ 2ND CLASS PILOT					
ROUTE ☒ OCEAN ☒ COAST WISE ☐ GREAT LAKES ☐ LAKES, BAYS AND SOUNDS ☒ RIVERS ☐ OTHER (Specify)					
TONNAGE ☒ UNLIMITED ☐ LESS THAN _____ GROSS TONS					
3. ENGINEERING CASUALTY: PERSONNEL INVOLVED		Z# OR SOCIAL SECURITY NUMBER 032-01-0646		LICENSED BY COAST GUARD ☒ YES ☐ NO	
TYPE OF LICENSE ☒ CHIEF ENGINEER ☐ ASSISTANT ENGINEER		TYPE PROPULSION ☐ STEAM ☒ MOTOR		HORSEPOWER LIMITATION ☒ UNLIMITED ☐ LESS THAN _____	
FLANKING OR BACKING RUDDERS INSTALLED ☐ YES ☒ NO		NO. OF SCREWS 2		WHISTLE LIGHT INSTALLED ☐ YES ☒ NO	
PILOT HOUSE CONTROLLED ☒ YES ☐ NO				IF ENGINE BACKED PRIOR TO CASUALTY, WAS ENGINE BACKED FULL ☐ YES ☒ NO	
MANNED ENGINE ROOM ☒ YES ☐ NO					
4. MANNER OF TOWING					
☒ PUSHING AHEAD ☐ TOWING ASTERN ☐ HIP BREAST TOW ☐ OTHER (Specify) _____					
LENGTH OF HAWSER _____					
WAS TOW INTEGRATED? ☐ YES ☒ NO		NUMBER OF BARGES LIGHT 0 LOADED 1		TOTAL CARGO TONNAGE (Long tons) 75,000 BBL	
TOTAL LENGTH OF TOW (Excluding towboat) 20 FEET				MAXIMUM WIDTH OF TOW 70 FEET	

ENCLOSE rough sketch or chart of area indicating wind and current direction and force, tow configuration including nature and tonnage of cargo on each barge. If empty tank barge in tow and not gas free include last cargo.

Coast Guard Investigation Report

Reverse of CG-1721

5. COLLISION - GROUNDING HOW WAS INITIAL CONTACT MADE? ☐ RADIO ☐ RADAR ☐ WHISTLE ☐ VISUAL ☒ OTHER (Specify) vibration		WAS LOOKOUT POSTED? N/A ☐ YES ☐ NO	WHERE WAS LOOKOUT LOCATED? N/A ☐ HEAD OF TOW ☐ OTHER (Specify)																				
MEANS OF COMMUNICATION BETWEEN WHEELHOUSE AND LOOKOUT N/A		BRIDGE TO BRIDGE RADIOTELEPHONE: CAPABILITY ON BOARD? ☒ YES ☐ NO RECEIVER IN OPERATION? ☒ YES ☐ NO WERE COMMUNICATIONS ATTEMPTED? ☐ YES ☒ NO DID OTHER VESSEL RESPOND? N/A ☐ YES ☐ NO WHAT CHANNEL/FREQUENCY USED? 13																					
WERE WHISTLE SIGNALS GIVEN? ☐ YES ☒ NO		WERE WHISTLE SIGNALS RECEIVED? ☐ YES ☒ NO																					
CARGO LOSS ☒ YES ☐ NO		RELEASED TO ☐ AIR ☒ WATER																					
SPECIFIC CARGO(S) → #2 OIL																							
AMOUNT(S) 76,000																							
6. HAZARD OR POTENTIAL HAZARD TO: ☐ POPULATION ☐ LIGHT ☒ MARINE/WILDLIFE ☐ LIGHT ☐ NAVIGATION ☐ LIGHT ☒ PUBLIC NUISANCE ☒ LIGHT ☐ MODERATE ☐ SEVERE ☒ MODERATE ☐ SEVERE ☐ MODERATE ☐ SEVERE ☐ MODERATE ☐ SEVERE																							
7. COULD CASUALTY HAVE BEEN PREVENTED OR MINIMIZED IF: <table style="width:100%;"> <tr> <td style="width:40%;">A. BRIDGE-TO-BRIDGE RADIOTELEPHONE USED?</td> <td style="width:20%;">☒ UNLIKELY</td> <td style="width:20%;">☐ POSSIBLY</td> <td style="width:20%;">☐ UNKNOWN</td> </tr> <tr> <td>B. LICENSED DECK PERSONNEL IN CHARGE?</td> <td>☒ UNLIKELY</td> <td>☐ POSSIBLY</td> <td>☐ UNKNOWN</td> </tr> <tr> <td>C. LICENSED ENGINEERING PERSONNEL ABOARD?</td> <td>☒ UNLIKELY</td> <td>☐ POSSIBLY</td> <td>☐ UNKNOWN</td> </tr> <tr> <td>D. VESSEL WAS INSPECTED BY COAST GUARD?</td> <td>☒ UNLIKELY</td> <td>☐ POSSIBLY</td> <td>☐ UNKNOWN</td> </tr> <tr> <td>E. WAS TOWBOAT OF SUFFICIENT HORSEPOWER FOR EXISTING LOAD AND CONDITIONS?</td> <td>☒ YES</td> <td>☐ NO</td> <td>☐ UNKNOWN</td> </tr> </table>				A. BRIDGE-TO-BRIDGE RADIOTELEPHONE USED?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN	B. LICENSED DECK PERSONNEL IN CHARGE?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN	C. LICENSED ENGINEERING PERSONNEL ABOARD?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN	D. VESSEL WAS INSPECTED BY COAST GUARD?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN	E. WAS TOWBOAT OF SUFFICIENT HORSEPOWER FOR EXISTING LOAD AND CONDITIONS?	☒ YES	☐ NO	☐ UNKNOWN
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B. LICENSED DECK PERSONNEL IN CHARGE?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN																				
C. LICENSED ENGINEERING PERSONNEL ABOARD?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN																				
D. VESSEL WAS INSPECTED BY COAST GUARD?	☒ UNLIKELY	☐ POSSIBLY	☐ UNKNOWN																				
E. WAS TOWBOAT OF SUFFICIENT HORSEPOWER FOR EXISTING LOAD AND CONDITIONS?	☒ YES	☐ NO	☐ UNKNOWN																				
<table style="width:100%;"> <tr> <td style="width:40%;">WAS ACTIONABLE NEGLIGENCE INVOLVED?</td> <td style="width:20%;">☐ YES</td> <td style="width:20%;">☒ NO</td> <td style="width:20%;"></td> </tr> <tr> <td>WAS RS 4450 ACTION INSTITUTED?</td> <td>☐ YES</td> <td>☒ NO</td> <td></td> </tr> <tr> <td>WOULD RS 4450 ACTION BE INDICATED IF PERSONNEL LICENSED OR CERTIFICATED?</td> <td>☐ YES</td> <td>☒ NO</td> <td></td> </tr> <tr> <td>IS REPORT OF STRUCTURAL FAILURE, COLLISION DAMAGE OR FIRE DAMAGE TO INSPECTED VESSEL ENCLOSED (CG-2752)?</td> <td>☐ YES</td> <td>☒ NO</td> <td></td> </tr> </table>				WAS ACTIONABLE NEGLIGENCE INVOLVED?	☐ YES	☒ NO		WAS RS 4450 ACTION INSTITUTED?	☐ YES	☒ NO		WOULD RS 4450 ACTION BE INDICATED IF PERSONNEL LICENSED OR CERTIFICATED?	☐ YES	☒ NO		IS REPORT OF STRUCTURAL FAILURE, COLLISION DAMAGE OR FIRE DAMAGE TO INSPECTED VESSEL ENCLOSED (CG-2752)?	☐ YES	☒ NO					
WAS ACTIONABLE NEGLIGENCE INVOLVED?	☐ YES	☒ NO																					
WAS RS 4450 ACTION INSTITUTED?	☐ YES	☒ NO																					
WOULD RS 4450 ACTION BE INDICATED IF PERSONNEL LICENSED OR CERTIFICATED?	☐ YES	☒ NO																					
IS REPORT OF STRUCTURAL FAILURE, COLLISION DAMAGE OR FIRE DAMAGE TO INSPECTED VESSEL ENCLOSED (CG-2752)?	☐ YES	☒ NO																					
REMARKS 																							

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Navigation Chart Marked by Captain Maynard

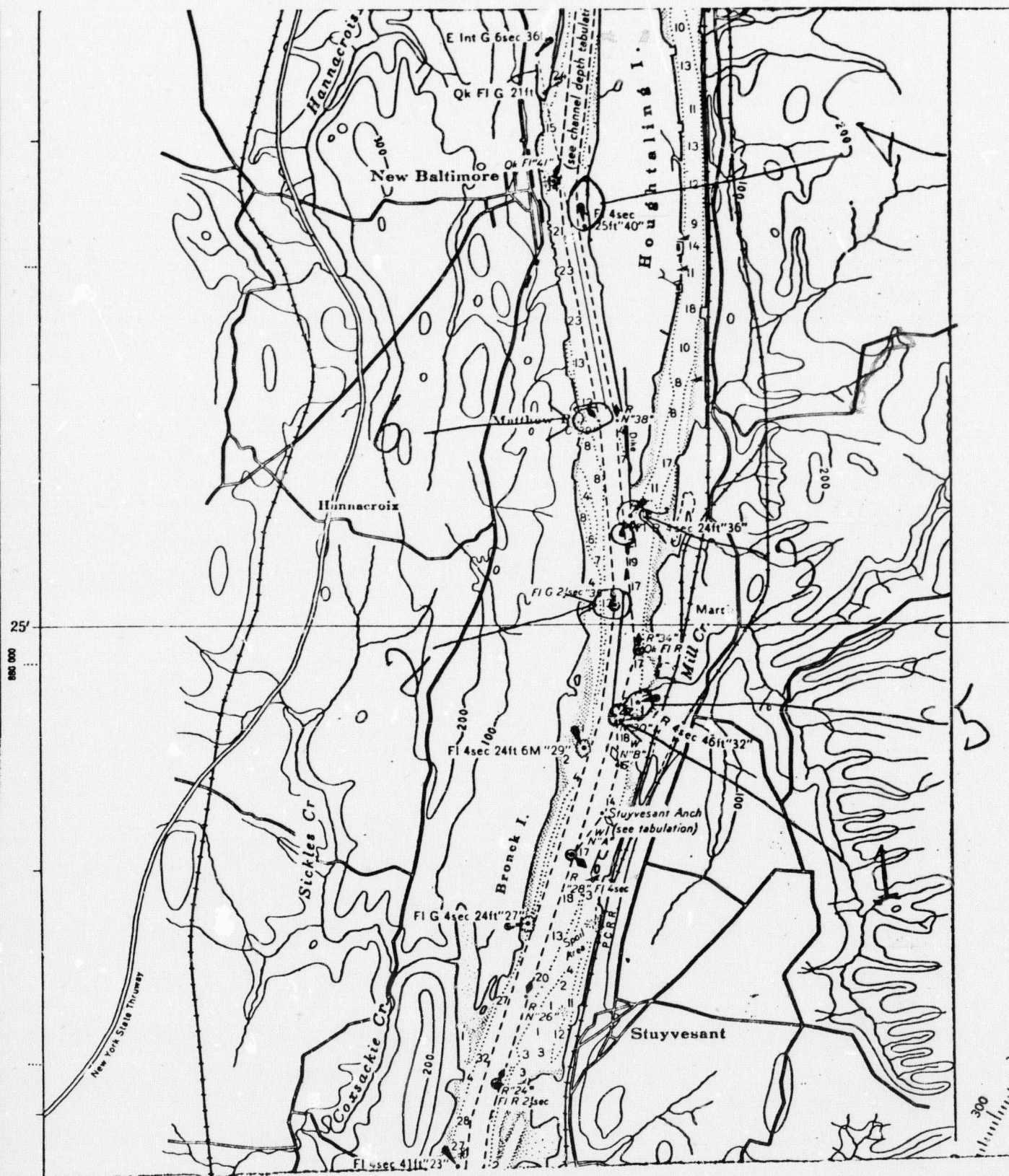
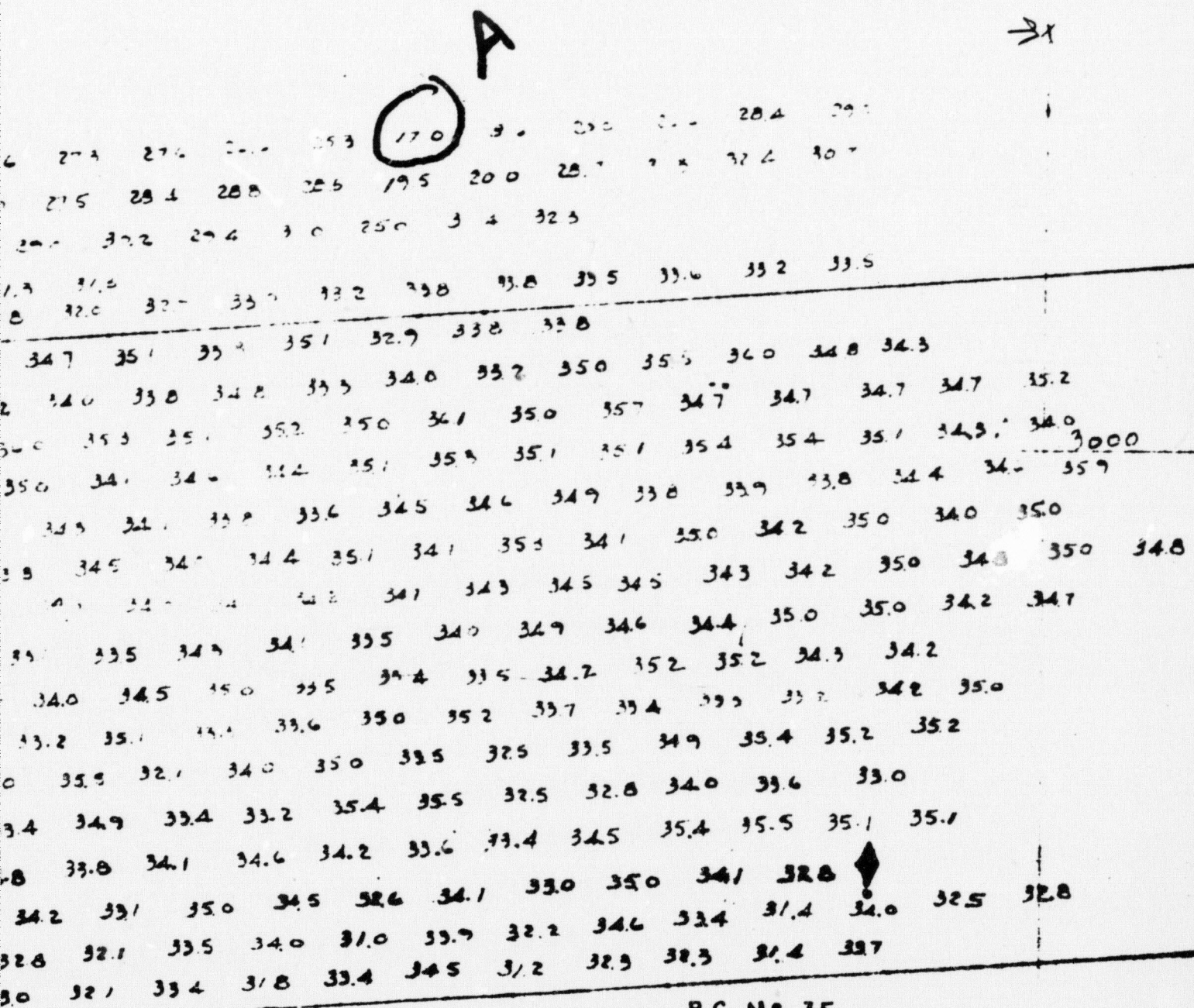


EXHIBIT 7

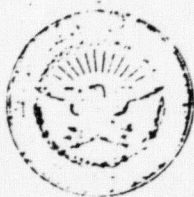
Army Corps of Engineers' Survey Chart



BC N# 35
2 NOV. 1973
EBB

MATCH LINE BELOW

EXHIBIT 11, for Identification

REPLY TO
ATTENTION OF:

Corps of Engineers' Letter of 15 November, 1973

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
26 FEDERAL PLAZA
NEW YORK, N. Y. 10007

NANOP-E

15 November 1973

SUBJECT: Navigation obstruction - Hudson River, New York.

Commander
Third Coast Guard District
ATTN: OAN
Governor Island
New York, New York 10004

1. Inclosed is a copy of letter dated 26 October 1973 regarding a vessel incident on the Hudson River involving the Barge B-95 being pushed by the Tug Judy Moran on 18 October 1973.
2. A hydrographic survey of the incident area was made by the Corps of Engineers and a copy of the survey maps was furnished your office directly on 14 November 1973.
3. It is requested that your office take necessary action to check the position of the channel buoys and reposition as necessary; mark the obstruction with a buoy until such time as alignment is established by the channel buoys, if out of position; and consider removal of the obstruction, which is the base of abandoned Coast Guard light previously known as Stuyvesant Light House or Kinder Hook Upper Light, shown on the attached map.

FOR THE DISTRICT ENGINEER

LOUIS W. PINATA
Chief, Operations Division2 Incl.
as
Filed in mailing tabs in Historical Library

EXHIBIT 12, for Identification
Coast Guard Letter of 13 December, 1973

Commander (can)
 Third Coast Guard District
 Governors Island
 New York, New York 10004
 (212) 264-8736

3260

13 December 1973

From: Commander, Third Coast Guard District
 To: Commanding Officer, USCGC RED BLANCH (WLM 686)

Subj: Remains of Bug Island Light; marking of

1. The Corps of Engineers has advised this office of an obstruction in the Upper Hudson River in close proximity to the east side of the channel between Upper Hudson River Lighted Buoy 34 and Upper Hudson River Light 36. Available information indicates the obstruction may be the remains of former Bug Island Light. Due to the nature and location of the obstruction, and the recent receipt of information indicating several accidents in the area, marking is considered necessary.
2. When next in the area temporarily establish Upper Hudson River Buoy 34A (LLP 272), a 2HS painted red with red retroreflector, on the channel line approximately 1,100 yards, 357°T from Upper Hudson River Light 36 (LLR 1943). Insure that the buoy properly marks the southerly end of the 18+ foot shoal as indicated on the Corps of Engineers survey print enclosed. Advise by message the exact location of the buoy and the depth of water corrected to mean low water. Insure prompt submission of SANDS report.
3. Base New York (i), by copy hereof, is directed to provide one 2HS buoy with suitable mooring to your unit.

T. T. WETHORE III
 by direction

Encl: (1) Corps Survey Print

Copy to: Base NY (i) per encl.

RETURN TO RED BLANCH FILE

ENCLOSURE, 2em 13 Dec 1973

BEST COPY AVAILABLE

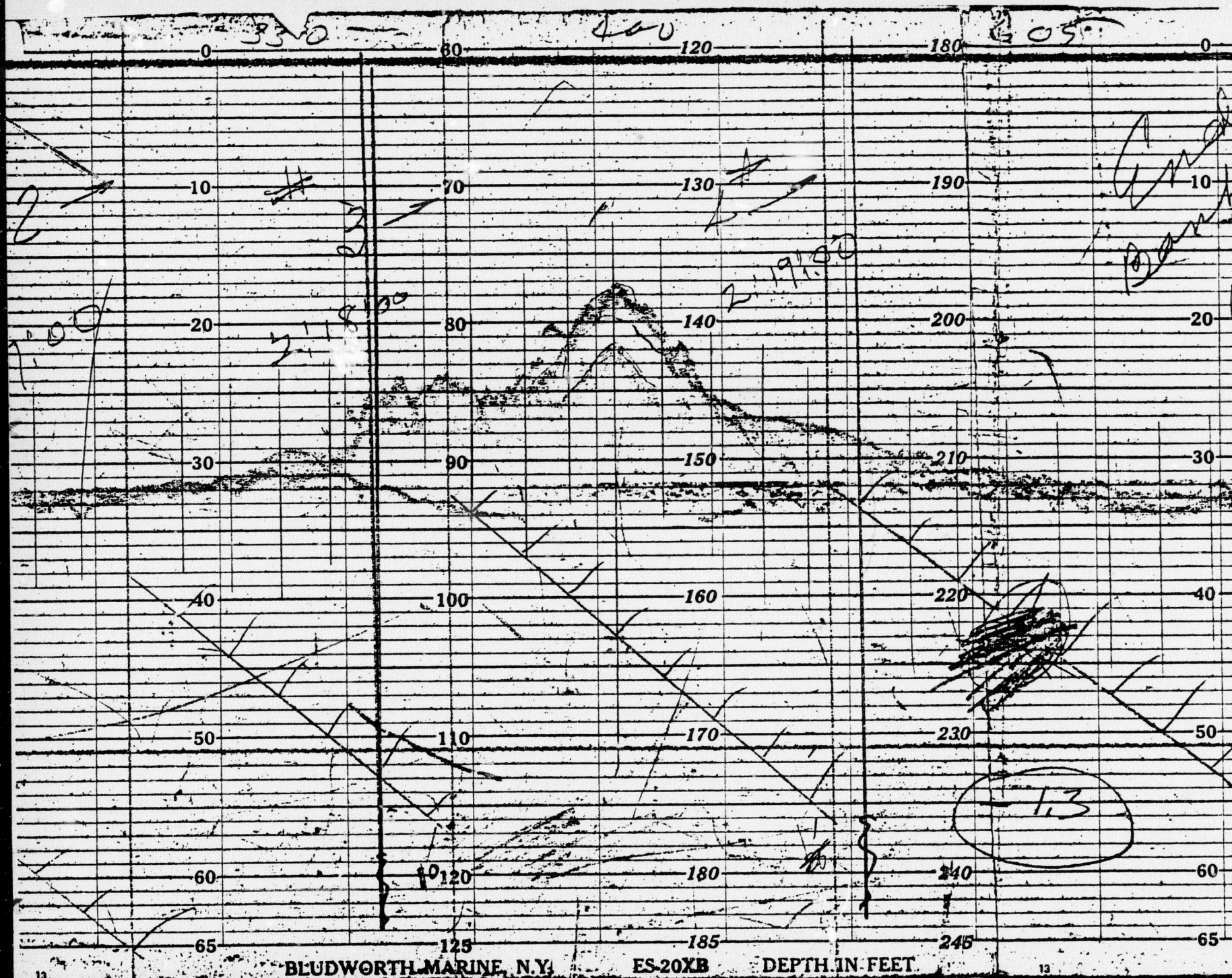
EXHIBIT 13, for Identification

Aids to Navigation Operation Request
Dated 19 December, 1973

U.S. COAST GUARD CG-213 (Rev. 2-67)		AIDS TO NAVIGATION OPERATION REQUEST (See Instructions on reverse)	
1. To: COMMANDANT (CGM) Chief, Operations Division			
2. PROJECT NUMBER DP-03-71-39-D	3. LOCATION New York-New York Harbor-Upper Hudson River	4. DATE SUBMITTED 19 Dec. 73	
5. CHART REFERENCES C&GS 284		6. NO. OF CG-3213A ATTACHED -0-	
7. SUMMARY OF ACTION PROPOSED Establish Upper Hudson River Buoy 3 ¹ / ₄ A (After-the-fact Project)			
8. JUSTIFICATION The Army Corps of Engineers has advised this office of an obstruction located near the east side of the channel, which caused several accidents in the past. This buoy is established, on the channel line, to prevent mariners from straying outside the channel and encountering the obstruction. Obstruction believed to be remains of former Bug Island Light which was apparently decommissioned over 70 years ago.			
9. NOTICE TO MARINERS, LIGHT LIST AND CHARTING DATA Upper Hudson River Buoy 3 ¹ / ₄ A has been established 1,180 yds, 357° from Upper Hudson River Light 32 (LL No. 1943) in 22 feet of water. Buoy is a Red Nun with Red Reflector LLP 272			
10. ESTIMATED COSTS		13. BUOY ALLOWANCE CHANGES	
A. CONTRACTS		UNIT	TYPE
B. CG MATERIAL	1,320.00	Base NY K (i)	3NR
C. INDUSTRIAL LABOR			+1
D. INDUSTRIAL TRAVEL			505
E. OVERHEAD			0
F. CONTINGENCIES			76
G. OTHER			
H. FUNDS REQUIRED	1,320.00	14. FORWARDED (Signature) <i>[Signature]</i>	
I. OP. EXPENSE	AC&I MU	(A) T. T. WETMORE III	
12. AC&I FUND REQUIREMENTS		16. FROM: COMMANDANT Chief, Operations Division	
A. FIRST QUARTER		RETURNED ☐ APPROVED ☐ DISAPPROVED ☐	
B. SECOND QUARTER		REMARKS	
C. THIRD QUARTER 74	1,320.00	2 copies to Hdqtrs	
D. FOURTH QUARTER		elf.	
E. TOTAL	1,320.00		
15.			
RECEIVED		DATE DEC 20 1973	
CHARTED		SIGNATURE <i>[Signature]</i>	
ACTION		D. E. PERKINS	
MAILED			
LOCAL			
WEEKLY			
LIGHT LIST			

EXHIBIT 25

Fathometer Tape for Run 8



E-16 -

E-17

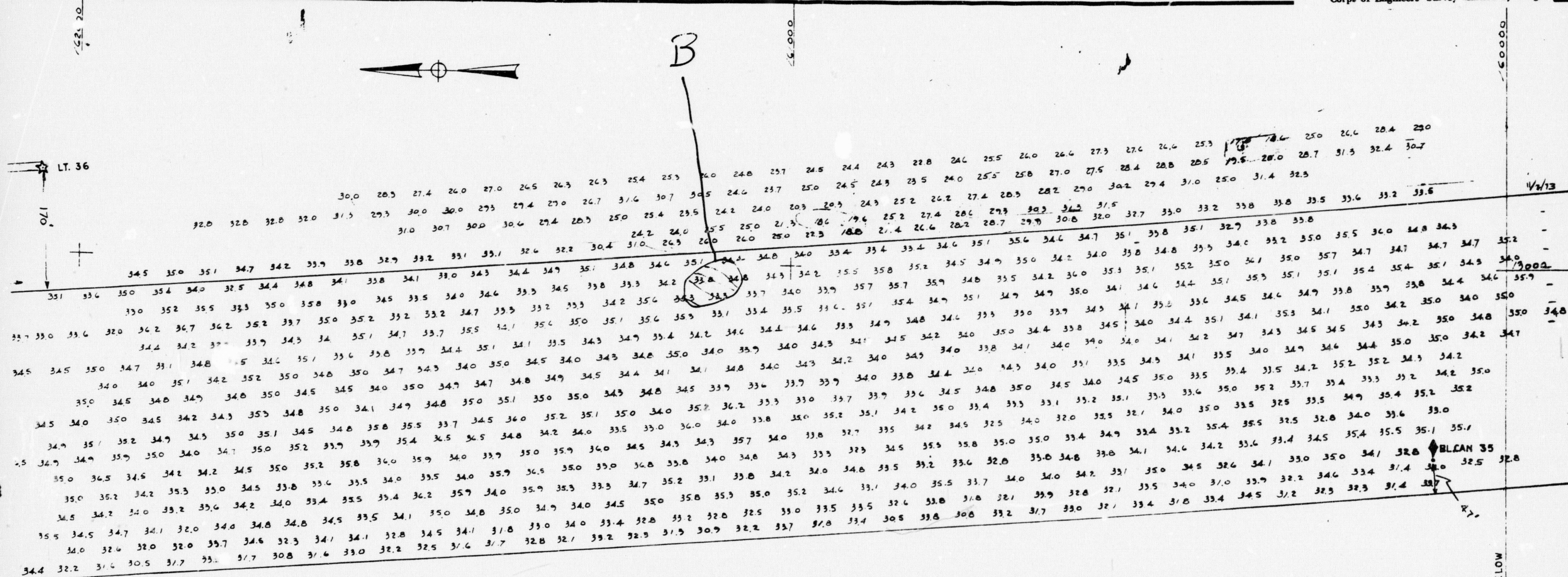
EXHIBIT 26

Army Corps of Engineers' Survey of June-July, 1963

SECTION NO. 1

SECTION NO. 1																				
"B"										"C"										
25.9	26.0	24.3	24.1	23.0	23.7	23.3	23.7	24.5	26.0	27.0	18.2	26.4	29.0	28.6	27.5	27.2	27.5	29.2	23.8	26.3
26.5	26.6	25.7	24.1	22.8	24.8	23.5	25.0	24.6	26.7	27.6	16.6	27.6	30.3	29.2	28.0	28.8	28.2	28.0	30.2	25.9
27.3	26.6	28.0	23.5	23.3	24.8	23.2	25.2	25.8	26.2	27.2	22.0	30.3	30.6	30.0	29.1	28.4	29.0	28.4	30.4	30.4
28.0	26.4	30.5	25.0	24.7	20.3	24.3	25.9	25.2	26.4	28.1	25.8	28.8	29.5	31.0	29.4	29.0	29.7	29.0	30.8	31.6
28.8	34.4	32.4	26.3	25.9	20.0	24.0	28.0	26.0	31.3	35.3	29.6	30.0	32.0	29.8	32.5	28.2	29.5	28.2	34.7	34.5
29.3	34.4	34.3	33.4	29.7	29.3	28.6	34.8	34.2	35.6	35.3	36.1	34.5	35.8	36.7	36.1	35.1	34.8	34.8	34.7	34.8
30.0	34.3	34.7	34.8	31.7	33.7	32.5	35.1	34.8	34.5	35.0	36.7	34.7	35.8	36.0	36.3	36.2	35.2	34.7	34.4	34.4
30.3	34.7	34.2	35.1	32.3	33.4	33.9	35.2	34.2	35.2	35.0	36.6	35.0	36.0	35.8	35.9	36.1	35.7	35.1	34.4	34.7
30.6	34.9	34.8	35.0	33.8	33.9	33.9	35.5	34.6	35.0	35.0	35.0	35.0	35.6	36.0	36.7	35.8	35.2	35.1	34.5	34.6
30.9	35.0	35.1	35.0	34.7	34.1	34.3	35.2	34.8	34.8	34.2	34.8	35.3	34.7	35.6	35.8	35.4	35.6	35.0	35.0	34.1
31.2	35.0	35.0	35.0	34.5	34.6	34.0	35.2	33.8	34.5	34.2	34.8	35.2	34.7	35.2	36.0	34.9	35.5	35.2	35.6	34.7
31.5	35.0	35.0	35.0	34.8	34.3	34.1	35.0	34.2	34.5	34.8	34.1	35.0	36.0	35.3	35.5	34.9	35.4	35.8	35.5	34.6
31.8	35.0	34.7	34.8	34.6	34.8	34.0	35.4	33.4	34.8	35.0	34.0	35.0	36.2	35.3	35.5	34.9	35.3	35.6	35.3	34.5
32.1	35.0	34.0	34.0	34.4	35.0	33.8	35.8	34.0	34.3	34.7	34.0	35.0	36.2	35.2	35.6	35.0	35.6	35.3	35.0	34.5
32.4	35.0	34.7	34.0	34.1	35.3	34.0	34.0	34.2	34.0	34.5	34.3	35.2	35.8	36.3	35.1	35.0	35.3	35.7	34.9	34.4
32.7	35.0	35.1	34.2	33.8	35.7	35.0	34.2	34.2	34.3	36.0	34.8	36.6	37.0	37.6	36.4	34.9	36.2	36.2	35.3	35.0
33.0	35.0	35.7	35.2	35.3	35.2	35.7	35.1	35.2	36.0	36.4	36.4	36.3	37.2	36.1	36.3	36.3	36.8	36.5	36.2	34.6
33.3	35.0	35.0	35.4	35.8	34.8	35.0	35.1	35.6	35.4	35.0	36.2	36.0	36.8	36.2	36.0	35.8	36.0	35.8	36.4	35.2
33.6	35.0	34.1	34.2	36.0	33.8	34.2	34.8	35.1	34.8	34.8	35.2	35.4	35.6	35.3	35.6	35.2	35.3	35.1	36.5	35.2
33.9	35.0	34.2	34.3	35.0	34.1	34.2	34.3	34.5	35.0	35.0	34.8	35.2	35.4	35.4	35.2	35.0	34.8	35.5	36.3	35.0
34.2	35.0	34.3	34.8	35.0	34.7	34.2	34.3	34.6	35.1	35.0	34.9	35.3	35.2	35.1	35.5	35.1	34.7	35.4	35.8	35.3
34.5	35.0	34.2	34.7	35.0	34.8	34.0	34.3	34.2	34.7	35.0	34.6	35.4	35.7	35.6	35.6	35.2	34.8	35.4	34.9	35.0
34.8	35.0	33.9	34.2	34.8	34.5	34.2	34.3	34.4	34.8	34.6	34.8	36.0	35.4	35.6	35.6	35.3	35.2	36.0	35.7	35.2
35.1	35.0	33.2	34.1	34.7	34.2	34.0	34.1	34.2	34.0	34.8	34.8	35.5	35.6	35.2	35.6	35.7	35.1	35.4	34.8	35.8
35.4	35.0	33.1	34.1	34.0	33.7	33.7	33.2	33.8	34.2	34.4	34.2	35.1	34.9	35.0	35.6	35.3	35.2	35.2	35.0	35.7
35.7	35.0	32.8	33.6	34.0	33.4	34.2	33.0	33.1	34.0	34.5	34.3	34.2	34.7	35.0	35.1	35.2	35.0	35.2	35.0	34.8
36.0	35.0	28.0	32.0	33.3	32.8	32.8	31.0	32.8	33.0	34.4	32.4	32.0	34.1	35.1	35.0	35.0	35.5	35.4	34.8	34.3
36.3	35.0	22.9	24.7	27.8	17.3	2.6	25.0	27.0	25.2	33.2	25.1	25.8	28.8	34.0	29.8	34.7	34.9	34.0	33.7	34.3
36.6	35.0	22.7	22.8	22.2	22.6	2.7	22.6	23.0	23.1	24.1	24.7	25.0	25.3	27.0	27.2	28.4	28.2	34.1	33.6	34.0
36.9	35.0	20.6	21.3	21.5	21.5	21.1	21.6	22.2	22.0	22.7	23.5	23.3	24.2	25.2	26.4	27.2	26.2	32.7	33.0	33.8
37.2	35.0	20.0	19.6	19.6	9.9	20.1	20.1	20.3	25.2	21.3	22.1	22.0	23.0	24.0	26.9	24.5	25.0	25.6	32.8	33.6
37.5	35.0															22.3	22.8	23.2	25.2	33.2
37.8	35.0																	21.8	22.8	30.3
38.1	35.0																		20.8	22.7
38.4	35.0																			21.0

BEST COPY AVAILABLE



BEST COPY AVAILABLE

TO:

E-20
EXHIBIT 36

Damage Report of Captain Maynard

Attention of Insurance Department

Damage Report

Damage To: "B-45"

Date: OCTOBER 18 1973 Time: (0001-2400) 0015

Damage By: (Tug, Barge, Ship): BARGE

If By Barge or Snip, Name Tug or Tugs Attending: JUDY HALLAN PUSHING

Name of Person in Charge: R. L. MAYNARD

Geographical Location: HUDSON RIVER - CUT CHANNEL APPROX 300' S OF HOUGHTALING ISLAND DIKE

Names of other crew members on watch or observing:

Name: Employed As: Location at time of damage:

WHITE J. FERGUSON

WHITE

PILOT HOUSE

D.H. A. THORNTON

D.H.

" "

Name any other vessels or persons in area: MOUNTAIN 300

Overcast ☐ Partly Cloudy ☐ Cloudy ☒ Clear ☒ Vis. Good ☒ Vis. Fair ☐ Vis. Poor ☐ Rain ☐ SnowCurrent Flood ☐ Ebb ☒ Time of H.W. ☐ L.W. ☐ Ref. Sta. NARRAGANSETT

Give description of damage with reference to fixed objects such as bitts, chocks, pier doors, cleats, draft marks, plates, etc. and approximate distances from damaged areas both vertically and horizontally.

E-21

Damage Report of Captain Maynard

Give a complete report of the cause including all events and circumstances leading to the damage. On the attached sheet provide a diagram coinciding with the data in your report.

WHILE TRANSITING UPPER HUDSON RIVER PUSHING BARGE "B-45" AHEAD, BARGE STRUCK SUBMERGED OBJECT ON BOTTOM LUMP IN NEAR MIDCHANNEL APPROXIMATELY 300' FEET SOUTH OF HOUGHTALING ISLAND DIKE W/BM. BARGE ROLLED OVER OBJECT WITH 3 DISTINCT SHOCKS.

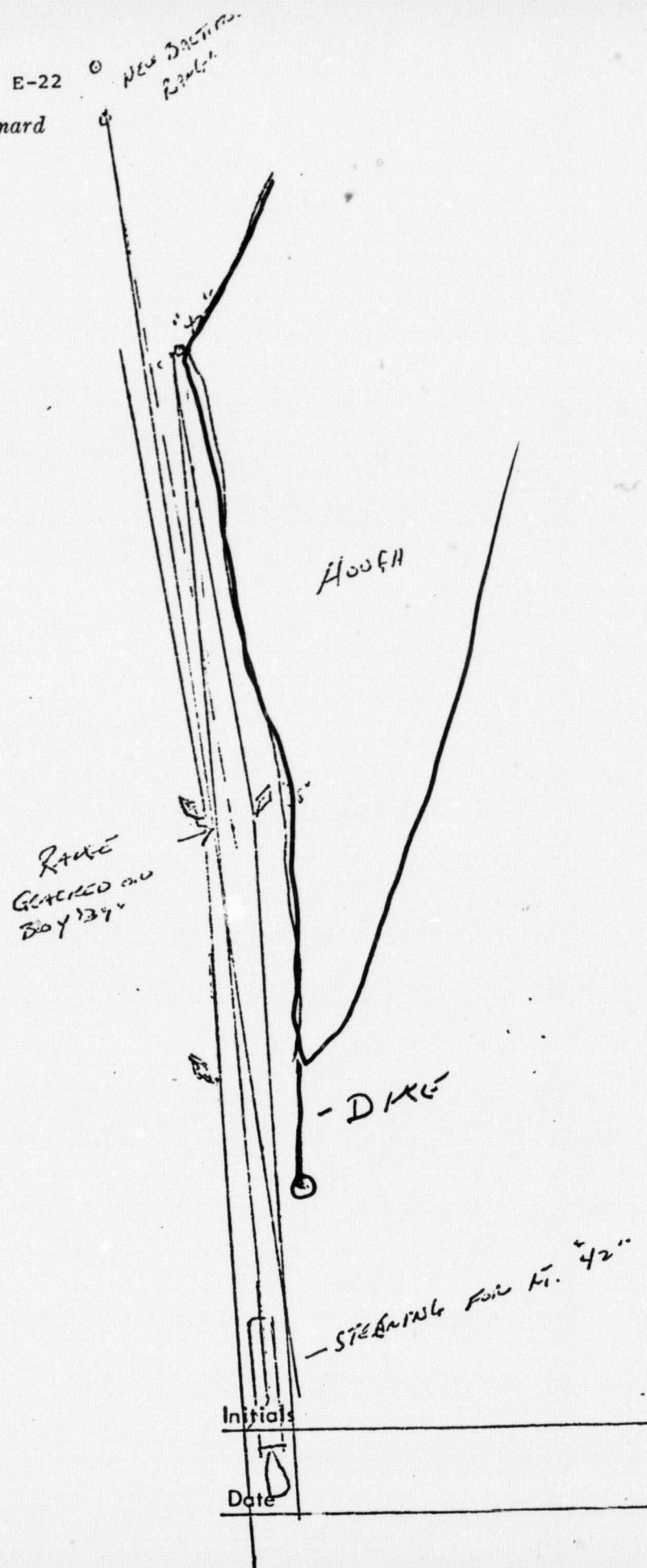
Signature _____

Date _____

All damages are to be orally reported to the office immediately. A written report, using the forms provided when possible, is to be mailed or delivered to the office

Telegram:

Damage Report of Captan Maynard



Initials

Date

E-23

EXHIBIT C1

Page From Light List

Station buoys are sometimes moored near lightships to mark the approximate station should the lightship be carried away or temporarily removed and to give the crews an indication of dragging. Since these buoys are always unlighted and, in some cases, moored as much as a mile from the lightship, the danger of a closely-passing vessel colliding with them is always present - particularly so during darkness or periods of reduced visibility.

BUOYS

It is imprudent for a navigator to rely on floating aids to navigation to always maintain their charted positions and to constantly and unerringly display their advertised characteristics. The obstacles to perfect performance are of such magnitude that complete reliability is manifestly impossible to achieve. Buoys are liable to be carried away, shifted, capsized, or sunk as the result of storms, ice conditions, collisions, or other accidents. Lighted buoys become extinguished or their lighting apparatus broken or deranged causing them to show improper light colors or light phase characteristics. Practically all audible signals on buoys are operated by the action of the sea and may consequently be silent during periods of calm water. They may fail to sound, regardless of wave activity, due to mechanical defects or damage to their sound-producing devices. Even if functioning properly, a sound buoy may not be heard at relatively close range due to the vagaries of sound in atmosphere as explained herein under "Fog Signals". Buoys that have been placed to mark shifting shoals may not always be properly located in relation to the obstructions they are meant to mark. This is particularly true during and immediately following heavy storms when the shoals are liable to shift their positions away from the buoys.

Buoys are moored to scopes of chain of various lengths, in some cases several times the depth of the water in which they are located. Like the LIGHTSHIP, the radius of swing should be taken into account.

The position of a buoy, as shown on the chart, actually represents the location of its sinker to which the mooring chain is shackled. The buoy, however, does not maintain position directly over its sinker. Being moored as they are, buoys have a tendency to yaw about under the influence of the wind and current. This action is most unpredictable and a vessel attempting to pass very close aboard always risks collision with a yawing buoy.

The idea seems to have developed among the more uninitiated that a wreck buoy always occupies a position directly over the wreck it is intended to mark. This idea is entirely erroneous. Buoys must be placed in position by a vessel. It is usually physically impossible for these vessels to maneuver directly over a wreck to place the sinker without incurring serious underwater damage to themselves. For this reason, a wreck buoy is usually placed on the seaward or channelward side of a wreck, the proximity thereto being governed by existing conditions. If necessary to reduce the possibility of confusion, more than one buoy is used per wreck in which case both may not be located on the seaward or channelward side of the wreck but the wreck will lie between them. Obviously, the mariner should not attempt to pass between buoys so placed.

Sunken wrecks are not always static. They are sometimes moved away from their buoys by severe sea conditions or other causes. The previously mentioned precaution regarding shoals shifting away from buoys placed to mark them, also applies in sunken wrecks and wreck buoys.

All buoys should, therefore, be regarded as warnings or guides and not as infallible navigation marks; especially those located in exposed positions. Whenever possible, a ship should be navigated by bearings or angles on fixed objects on shore and by soundings rather than by reliance on buoys.

Racing buoys. All privately maintained racing buoys are not listed in this publication. Information concerning these buoys may be obtained from the U. S. Coast Guard District Office.

RADIOBEACONS AND RADIO DIRECTION FINDERS

Accuracy of radio direction finders is dependent upon the skill of the operator, the equipment used, and radio wave interference. Skill in operations of a manual radio direction finder can be acquired only through practice and by following the operating instructions provided with the equipment. An understanding of adverse conditions and direction finding limitations will be an asset to the prudent navigator.

As an operator obtains bearings with a manually revolving

loop type direction finder, he can estimate the bearing by the arc of silence (NULL) or minimum strength. Automatic direction finders do not afford this advantage. However, an experienced operator can evaluate the direction finder's performance by the ease and smoothness (lack of jitter) with which the indicator approaches a bearing.

Erroneous radio direction finder bearings may result from the following conditions:

(a) Currents induced in the direction finder antenna by re-radiation from the structural features of the vessel's superstructure and distortion of the radio wave front due to the physical dimensions and contour of the vessel's hull.

(b) Night effect caused by the combination of two radio wave fronts arriving at the receiver simultaneously. One wave travels directly from the transmitter to the direction finder and is called the ground wave. The other is a down-coming radio wave reflected off the ionosphere and is called the skywave. This effect is more predominant around the time of morning and evening twilight, but it remains throughout the night on the low frequency band. On higher frequencies a similar effect exists during the day as well as at night. Beyond the normal groundwave range, only the skywave is received.

Bearings taken around the periods of morning and evening twilight and at night should be treated or accepted with doubt as to their accuracy.

Since the skywave itself is complex in nature it should not be used with a conventional direction finder.

(c) Lateral deviation of the radio wave can occur when the great circle route between the transmitter and the receiver is roughly parallel to a coastline or passed over a coastline. Bearings that are within 10 to 15 degrees of a coastline should not be trusted. Likewise, bearings taken when a land mass is between the transmitter and the vessel should be used with caution.

(d) Most direction finders have a vertical sensing antenna to eliminate any possibility of a 180 degree error in reading. Such an ambiguity is possible in all direction finders if the sensing circuits should become inoperative.

Conclusions: Correct direction finder calibration will compensate for errors caused by induced currents and vessel configuration. The usual method of calibration is to obtain a series of simultaneous radio and visual bearings on a transmitter. This may be done while a ship swings at anchor, or more quickly by steaming in a circle within sight of the transmitting antenna. It is essential that radio direction finders be accurately calibrated; therefore, recalibration should be made after any changes to the ship's structure or rigging or whenever there is reason to believe the previous calibration has become inaccurate. The direction finder should be calibrated by competent personnel.

Before taking bearings on a commercial station broadcasting entertainment programs, the mariner should consider:

(a) The operating frequency of the station may differ widely from the frequency for which the direction finder is calibrated.

(b) The broadcast antenna may be remote from the broadcast station and,

(c) The majority of these stations are inland.

Accordingly, the use of broadcast stations to obtain a direction finder bearing is not recommended.

Due to the many factors which go into the transmission and reception of radio signals, a ship cannot estimate with any degree of accuracy its distance from a radiobeacon by the strength of the received signals.

A vessel steering a course for a radiobeacon should observe the same precautions that apply when steering for a light or any other mark. If the radiobeacon is a lightship or off-shore platform, particular care should be exercised to avoid the possibility of collision. Sole reliance should never be placed on sighting the lightship or light station or listening for a fog signal in time to avoid a collision.

As a further aid to assure proper direction finder operation, the mariner should check, whenever possible, the accuracy of the direction finder against visual bearings. This will afford the operator practice and confidence in his equipment as well as an operational check of the direction finder itself.

EXHIBIT C2

Page From Light List

Excerpts from regulations pertaining to warning signals for Coast Guard vessels while handling or servicing aids to navigation, as found in 33 CFR part 80 subchapter D. *Inland waters* (Inland Rules):

DAY—Two orange and white vertically striped balls in a vertical line not less than 3 feet nor more than 6 feet apart displayed from the yardarm.

NIGHT—Two red lights in a vertical line not less than 3 feet nor more than 6 apart. Vessels, with or without tows, passing Coast Guard vessels displaying this signal shall reduce their speed sufficiently to insure the safety of both vessels, and when passing within 200 feet of the Coast Guard vessel displaying this signal, their speed shall not exceed 5 miles per hour.

High seas (International Rules):

DAY—Three shapes not less than 2 feet in width in a vertical line not less than 6 feet apart, the highest and lowest being red globular shapes and the middle being a white diamond shape.

NIGHT—Three lights in a vertical line not less than 6 feet apart, the highest and lowest being red and the middle being white in color.

OTHER LIGHT LISTS PUBLISHED BY COAST GUARD

VOLUME II. ATLANTIC and GULF COAST, describing aids to navigation in United States waters from Little River, South Carolina to Rio Grande River, Texas and the Greater Antilles.

VOLUME III. PACIFIC COAST AND PACIFIC ISLANDS, describing aids to navigation in United States waters on the Pacific Coast and outlying Pacific Islands. For the convenience of mariners there are also included the lighted aids on the coast of British Columbia, maintained by Canada.

VOLUME IV. GREAT LAKES, describing aids to navigation maintained by the United States Coast Guard, and the lighted aids maintained by Canada, on the Great Lakes and the St. Lawrence River, above St. Regis River.

VOLUME V. MISSISSIPPI RIVER SYSTEM, describing aids to navigation on the Mississippi and Ohio Rivers and navigable tributaries.

All Coast Guard light lists are for sale by the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402 and by sales agencies as listed in the Weekly Notices to Mariners.

Charts, Coast Pilots, Tide Tables, and Current Tables of the coasts covered by Coast Guard Light Lists of the Atlantic Gulf and Pacific Coasts and the Great Lakes are published by the National Ocean Survey, Washington Science Center, Rockville, Md. 20852, and are for sale by that agency and by sales agencies as listed in the Weekly Notices to Mariners. Maps and related publications for the Mississippi River System covered by the Mississippi and Ohio Rivers Light List are published by the various District Engineers, United States Army, located in the area.

** CAUTIONARY NOTES CONCERNING AIDS TO NAVIGATION**

REPORTING DEFECTS IN AIDS TO NAVIGATION

Experienced mariners realize that the Coast Guard cannot keep the thousands of aids to navigation comprising the federal system under simultaneous and continuous observation and that, for this reason, it is impossible to maintain every buoy, daybeacon, light, fog signal and other aid operating properly and on its charted position at all times. Therefore, the safety of the mariner and that of all persons embarked or serving to vessels will be enhanced if every person who discovers an aid to be missing, sunk, capsized, or damaged, or who observes a defect in the position or characteristic of any aid, will promptly notify the nearest Coast Guard District Commander of the fact. Radio messages should be prefixed "Coast Guard" and transmitted directly to one of the United States Government shore radio stations listed under "Activity" in Section 400B of

Radio Navigational Aids NO-117 for relay to the Coast Guard District Commander. If the radio call sign of the nearest United States Government shore station is not known, radio-telegraph communication may be established by the use of the general call "NCG" on the frequency of 500 kilohertz. Merchant ships may send messages relating to defects noted in aids to navigation through commercial facilities only when they are unable to contact a United States Government shore radio station. Charges for these messages will be accepted "collect" by the Coast Guard.

Suggestions for improvement in the system of aids should be submitted by mail to the Commandant, U. S. Coast Guard, Washington, D. C. 20590.

Some of the deficiencies, derangements, and phenomena that occasionally occur and which are potential sources of danger to the mariner, and certain situations and conditions which require particular caution on his part, are discussed in the following paragraphs.

LIGHTS

The condition of the atmosphere has a considerable effect upon the distance at which lights can be seen. Sometimes lights are obscured by fog, haze, dust, smoke, or precipitation which may be present at the light, or between it and the observer, but not at the observer, and possibly unknown to him. On the other hand, refraction may often cause a light to be seen farther than under ordinary circumstances. A light of low intensity will be easily obscured by unfavorable conditions of the atmosphere and less dependence can be placed on its being seen. For this reason, the intensity of a light should always be considered when expecting to sight it in thick weather. Haze and distance may reduce the apparent duration of the flash of a flashing light. In some conditions of the atmosphere white lights may have a reddish hue. Colored lights are more quickly lost to sight under weather conditions which tend to reduce visibility than are white lights.

It should be remembered that lights placed at great elevations are more frequently obscured by clouds, mist, and fog than those near sea level.

In regions where ice conditions prevail in the winter, the lantern panes of unattended lights may become covered with ice or snow, which will greatly reduce the visibility of the lights and may also cause colored lights to appear white.

The increasing use of brilliant shore lights for advertising, illuminating bridges, and other purposes, may cause marine navigational lights, particularly those in densely inhabited areas, to be outshone and difficult to distinguish from the background lighting. Mariners are requested to report such cases as outlined above in order that steps may be taken to improve the conditions.

The "loom" of a powerful light is often seen beyond the limit of visibility of the actual rays of the light. The loom may sometimes appear sufficiently sharp to obtain a bearing.

At short distances, flashing lights may show a faint continuous light between flashes.

It should be borne in mind that, when attempting to sight a light at night, the range of vision is considerably increased from aloft. By noting a star immediately over the light an accurate compass bearing may be indirectly obtained on the light from the navigating bridge although the light is not yet visible from that level.

The distance of an observer from a light cannot be estimated by its apparent intensity. Always check the characteristics of lights in order that powerful lights visible in the distance shall not be mistaken for nearby lights showing similar characteristics at low intensity (such as those on lighted buoys).

If lights are not sighted within a reasonable time after prediction, a dangerous situation may exist requiring prompt resolution or action to insure the safety of the vessel.

The apparent characteristic of a complex light may change with the distance of the observer. For example, a light which actually displays a characteristic of fixed white varied by flashes of alternating white and red (the flashes having a decreasing range of visibility in the order: flashing white, flashing red, fixed white) may, when first sighted in clear weather, show as a simple flashing white

EXHIBIT C3

Page From Light List

(1)	(2)	(3)	(4)	(5)	(6)	(7)	
No.	Name Characteristic	Location Lat. N. Long. W.	Nominal Range	Ht. above water	Structure Ht. above ground Daymark	Remarks Year	
NEW YORK				THIRD DISTRICT			
NEW YORK HARBOR							
Upper Hudson River							
		¹ Channel Buoys located 50 feet outside channel limit.					
		² Channel buoys located 100 feet outside channel limit.					
1936	— LIGHT 9 Fl. W., 4 ^s	On end of Fitchs Wharf.		6	48	Black skeleton tower, small white house, black base.	1857-1931
	— Channel Buoy 11.	In 25 feet				Black can.	White reflector.
	— Buoy 12	In 29 feet				Red nun.	Red reflector.
1937	— LIGHT 13. Fl. G., 4 ^s	In 7 feet		4	26	Black skeleton tower, small white house, concrete base.	1934
	Coxsackie Island South Shoal Buoy.	In 12 feet, 200 feet outside channel limit, on south end of shoal below Coxsackie.				Black and red horizontal bars, can.	White reflector.
	— Channel Buoy 15	In 24 feet, 50 feet outside channel limit.				Black can.	White reflector.
1938	— LIGHT 17. Fl. W., 4 ^s	On end of shoal, south of Coxsackie Island.		6	24	Black skeleton tower, small white house, black base.	1932
	— Channel Buoy 19.	In 20 feet				Black can.	White reflector.
	— Channel Buoy 20.	In 20 feet ¹				Red nun.	Red reflector.
1939	— LIGHT 22. Fl. R., 4 ^s	On flats, abreast of Rattlesnake Island.		4	24	Red skeleton tower, small white house, red base.	1891-1928
1940	— LIGHT 23. Fl. W., 4 ^s	Off north end of Rattlesnake Island.		7	41	Black skeleton tower, small white house.	1830-1940
	— Channel Buoy 24.	In 25 feet ¹				Red nun.	Red reflector.
	— Channel Buoy 26.	In 18 feet ¹				Red nun.	Red reflector.
1941	— LIGHT 27. Fl. G., 4 ^s	Near lower end of Bronx Island.		4	24	Black skeleton tower, small white house, black base.	1932
	— Channel Buoy 28	In 36 feet				Red nun	
	Stuyvesant Upper Hudson River Anchorage Buoy A.	In 36 feet				White nun	
	Stuyvesant Upper Hudson River Anchorage Buoy B.	In 33 feet				White nun	
1942	— LIGHT 31. Fl. W., 4 ^s	In 5 feet		6	24	Black skeleton tower, small white house, black base.	1932-1936
	— Channel Buoy 30	In 33 feet				Red nun	
1943	— LIGHT 32. Fl. R., 4 ^s	In 5 feet		6	46	Red skeleton tower, small white house.	1829
	— Channel Buoy 34.	In 21 feet ¹				Red nun	Red reflector.
	— Channel Buoy 35.	In 21 feet				Black can.	White reflector.
1944	— LIGHT 36. Fl. R., 4 ^s	On south end of dike off south end of Houghtaling Island.		4	24	Red skeleton tower, small white house.	1914-1919
	— Channel Buoy 38.	In 15 feet				Red nun.	Red reflector.
	— Channel Buoy 39.	In 21 feet				Black can.	White reflector.
1945	STONEHOUSE BAR CHANNEL NORTH END RANGE FRONT LIGHT. Qk. Fl. G.	Above New Baltimore. 42 27.2 73 47.3			21	Black skeleton tower with black diamond daymark on small white house.	Visible on rangeline only. 1946
1946	STONEHOUSE BAR CHANNEL NORTH END RANGE REAR LIGHT. E. Int. G., 6 ^s	315 yards 349½" from front light.			36	White daymark with black center on black skeleton tower, small white house.	Visible on rangeline only. 1946

E-26

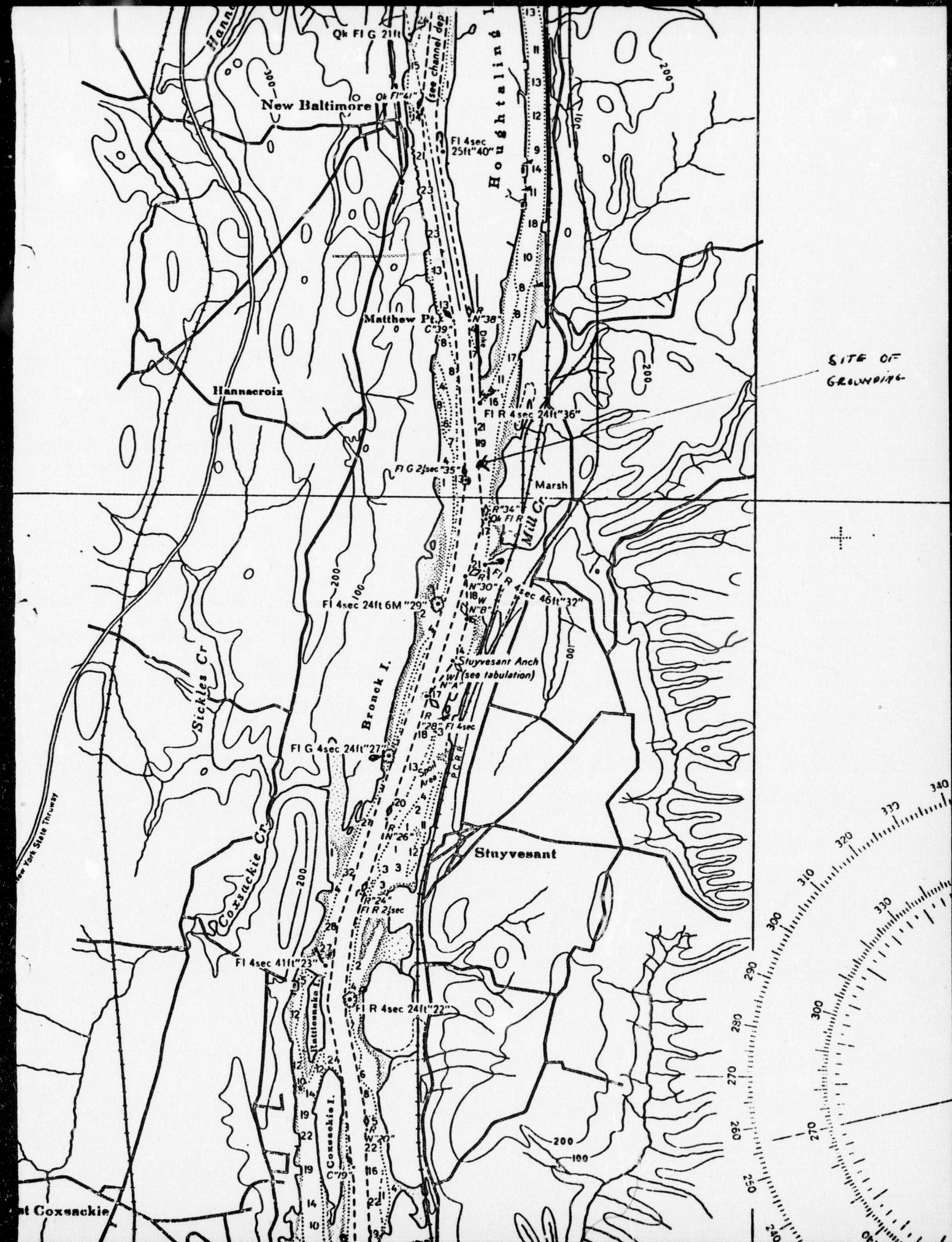
Chartlet from Moran's Pre-Trial Memo

(See Opposite) 

E-27

Annex B of Post-Trial Brief of U.S.A.

(See Opposite) 



OVERSIZE FOLDOUT(S) FOUND HERE IN THE
PRINTED EDITION OF THIS VOLUME IS(ARE)
FOUND FOLLOWING THE LAST PAGE OF TEXT
IN THIS MICROFICHE EDITION

SEE FOLDOUT NO 1

Service of three (3) copies of the within *Joint Exhibit Vol.*
is admitted this *7th* day of *July* 19 *77*



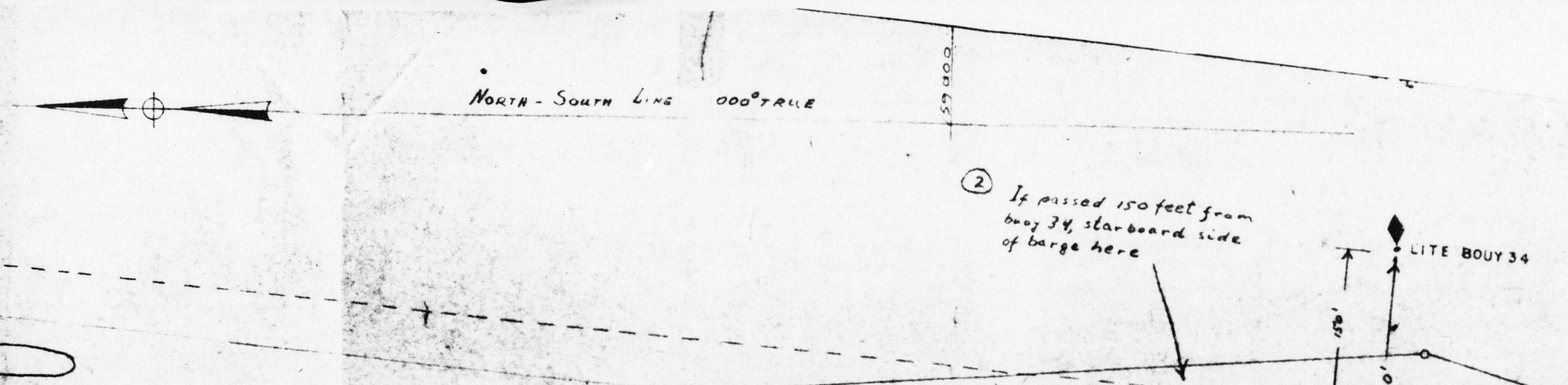
63000

62000

61000



60000



ANNEX B

Note: A copy of the
Print



WEST CHANNEL LINE

REACH 23

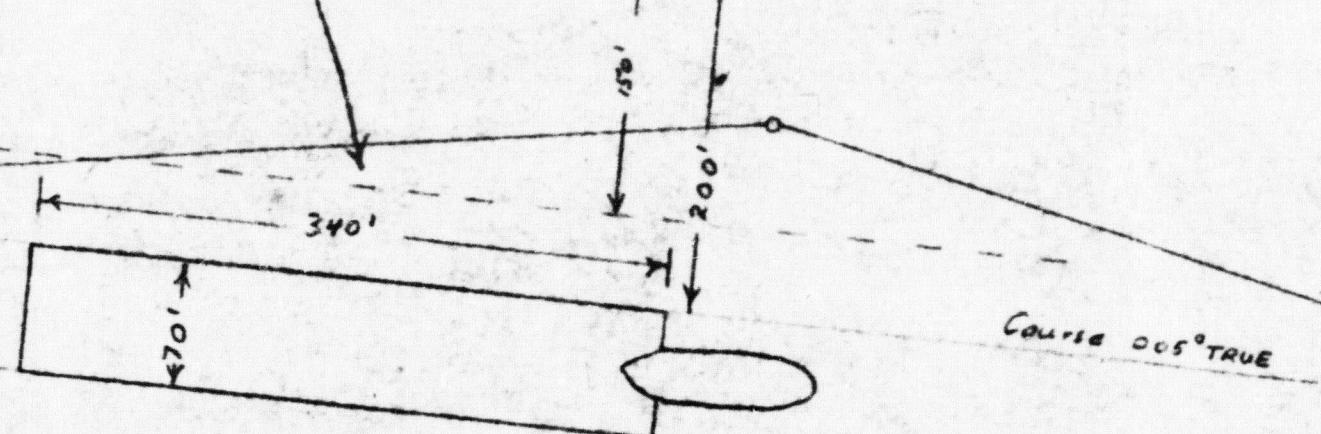
MATCH LINE BELOW

60000

28.4 29.0
 33.2 33.5
 34.0 34.8 34.3
 34.7 34.7 34.7
 35.4 35.1 34.5
 34.2 35.0 34.0
 34.2 35.0 34.8
 35.0 35.0 34.2
 34.3 34.2
 35.2 34.2 35.0
 35.4 35.2 35.2
 33.6 33.0
 35.5 35.1 35.1
 32.8 B.L. CAN 35
 34.4 34.0 32.5
 34.4 33.7

50000 MATCH LINE BELOW

③ Passing buoy 35 still on course 005° (Maynard dep. 46-47).



① Barge and tug on course 005° true passing 200 feet from buoy 34 (Maynard dep 52; Tr. 99-101).

ANNEX B

Note: Acopy of the print of the survey which is Ex 27 has been used, not a copy of Ex. 27 because photocopying of the actual exhibit would introduce distortion error

R. NUN 30

NOTES
 Coordinates are expressed in feet and refer to the CORPS OF ENG System
 Soundings or Elevations refer to M.L.W. As determined from
 Bench Mark STUYVESANT LIGHT STA.
 Elevation 8.60 feet above M.S.L.
 The Plane of mean low water is 1.75 feet below mean sea level.

DEPARTMENT OF THE ARMY NEW YORK DISTRICT CORPS OF ENGINEERS NEW YORK, N. Y. 10003	
SURVEY OF: HUDSON RIVER NY. SOUTH OF HOTALING ISLAND SOUNDINGS VIC. OF REPORTED OBSTRUCTION	
SCALE 1:1000	
PLOTTED BY	DATE OF SURVEY 25 10 1973
SUBMITTED BY	FIELD BOOKS 60-40
APPROVED <i>Raymond E. [Signature]</i> CHIEF SURVEY BRANCH	SHEET 1 OF 2
FILE NO. 189	

